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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/014,521

12/14/2001

Hiroshi Yabe

XA-9598

3563

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MILES & STOCKBRIDGE PC  
1751 PINNACLE DRIVE  
SUITE 500  
MCLEAN, VA 22102-3833

EXAMINER

RODRIGUEZ, PAMELA

ART UNIT

PAPER NUMBER

3657

NOTIFICATION DATE

DELIVERY MODE

05/06/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocketing@milesstockbridge.com  
sstiles@milesstockbridge.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/014,521	<b>Applicant(s)</b> YABE ET AL.	
	<b>Examiner</b> Pam Rodriguez	<b>Art Unit</b> 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 5-8 is/are allowed.
- 6) ☒ Claim(s) 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 8, 2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima.

Regarding Claim 9, Fukushima discloses a damper assembly 3/23 with a torque limiter 51 having most all the features of the instant invention including: a single torque transmission path between an input axis and an output axis (see column 2 lines 50-63), a friction torque limiter 51 between the input axis or the output axis (see Figure 2) and

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an airtight damper 3/23, wherein the friction torque limiter is in series with the damper 3/23 (see Figure 2), and wherein the torque limiter 51 is provided inside the damper 3/23 (see Figure 2) and includes a plurality of friction plates 3.

However, Fukushima does not disclose that the friction plates are provided with a wet-type friction material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the friction plates of Fukushima to be of the wet-type as a matter of design preference, dependent upon the desired type of torque to be transmitted. A wet-type friction material friction plate would merely be an alternate equivalent means of transmitting the torque throughout the system.

Regarding Claim 10, note that friction plates 3 are pressed by a spring 55.

Regarding Claim 11, Fukushima discloses that the friction plates 3 are arranged with a torque transmission member 52 disposed therein.

However, Fukushima does not disclose that the transmission member is a torque transmission plate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the balls of Fukushima for a torque transmitting plate as an alternate means of transmitting the torque throughout the system. Whether a ball structure or a plate type structure is used, as long as the torque is properly transmitted, the means used to do so is merely a matter of design choice.

Regarding Claim 12, Fukushima discloses that the friction plates 3 are engaged with a torque transmitting member 10 of the damper (see Figure 1 ) and the torque transmission means/plate is engaged with a drive plate (see the first plate 3).

However, Fukushima does not disclose that the engagement between these mating parts is a spline type of engagement.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the friction plates of Fukushima to be spline-engaged with the torque transmitting member and the torque transmission means (plate) to be spline-engaged with the drive plate as an alternate means of securing the attachment between the mating parts. As long as some sort of connection is maintained between the friction plates and the torque transmitting member and between the torque transmission plate and the drive plate, the means used to secure the parts together is arbitrary.

Regarding Claim 13, Fukushima discloses that the friction plates 3 are engaged with a radially adjacent member 10.

However, Fukushima does not disclose that the engagement between the parts is a spline-type of engagement.

See the obviousness statement for Claim 12 above which applies here as well.

***Allowable Subject Matter***

4. Claims 2 and 5-8 are allowed.

***Response to Arguments***

5. Applicant's arguments filed April 8, 2009 have been fully considered but they are not persuasive.

Firstly applicant points out that the previous rejection of Claim 9 contained the statement "see Claim 5 above and note the plurality of friction plates 1". As Claim 5 now stands allowed, the reference to Claim 5 in support of the rejection of Claim 9 was not understood by the applicant.

In response to this, the text of the rejection in reference to the previous rejection of Claim 5 as it now pertains to Claim 9 is presented above. The examiner apologizes for any confusion this may have caused.

Next, applicant argues that Fukushima's element 1 is an input case and is not a friction plate of a torque limiter which is in series with an airtight damper as claimed in Claim 9.

The examiner concurs with applicant to this respect and the examiner has now corrected the reference numeral designation in her previous rejection to reflect the friction plates as being elements 3 in Fukushima.

And lastly, applicant argues that Fukushima does not teach applicant's claimed arrangement wherein a friction torque limiter is arranged in series with an airtight damper and provided inside the damper, and wherein the friction torque limiter so arranged includes a plurality of friction plates provided with wet-type friction material.

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Applicant argues that the torque limiting effect in Fukushima is provided by an arrangement of cooperating conical depressions and spherical balls and thus, Claim 9 as amended, distinguishes patentably from Fukushima.

While applicant is correct that Fukushima provides torque limiting in a different manner than that of applicant, the claim language is at issue here. And with regards to Claim 9, applicant merely requires the same structural components as provided in Fukushima with the addition of a wet-type friction plate, which is merely an alternate equivalent type of plate. Therefore, at least when the claims are given their broadest reasonable interpretation, the rejections presented to this extent are feasible.

And, more specifically, with regards to the wet-type material on the friction plates of Fukushima, the examiner contends that constructing the friction plates to be provided with a wet material is merely a design choice. And as long as torque is limited through the damper, the type of friction plate used to perform this function is arbitrary.

It is for these reasons that the rejections of Claims 9-13 have been maintained.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 571-272-7122. The examiner can normally be reached on Mondays 5:30 AM - 4 PM and Tuesdays 8 AM - 2 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rob Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pam Rodriguez  
Primary Examiner  
Art Unit 3657

/Pam Rodriguez/  
Primary Examiner, Art Unit 3657  
05/04/09